

## Appendix 1. Alignment of huBUB3 coding sequences

GGGAGCCCAAGATGACCGGTTCTAACGAGTTCAAGCTGAACCAGCCA  
GGGAGCCCAAGATGACCGGTTCTAACGAGTTCAAGCTGAACCAGCCA  
GGGAGCCCAAGATGACCGGTTCTAACGAGTTCAAGCTGAACCAGCCA  
GGGAGCCCAAGATGACCGGTTCTAACGAGTTCAAGCTGAACCAGCCA

invention disclosure  
Lee-Ng sequence  
'182, SEQ ID NO:1  
'700, SEQ ID NO:1

CCCGAGGATGGCATCTCCTCCGTGAAGTTCAGCCCCAACACCTCCCAGTTCTTGCTTGTC  
CCCGAGGATGGCATCTCCTCCGTGAAGTTCAGCCCCAACACCTCCCAGTTCTTGCTTGTC  
CCCGAGGATGGCATCTCCTCCGTGAAGTTCAGCCCCAACACCTCCCAGTTCTTGCTTGTC  
CCCGAGGATGGCATCTCCTCCGTGAAGTTCAGCCCCAACACCTCCCAGTTCTTGCTTGTC

TCCTCCTGGGACACGTCCGTGCGTCTCTACGATGTGCCGGCCAACTCCATGCCGGCTCAAG  
TCCTCCTGGGACACGTCCGTGCGTCTCTACGATGTGCCGGCCAACTCCATGCCGGCTCAAG  
TCCTCCTGGGACACGTCCGTGCGTCTCTACGATGTGCCGGCCAACTCCATGCCGGCTCAAG  
TCCTCCTGGGACACGTCCGTGCGTCTCTACGATGTGCCGGCCAACTCCATGCCGGCTCAAG

TACCAGCACACCGGCGCCGTCTTGGACTGCGCCTTCTACGATCCAACGCATGCCCTGGAGT  
TACCAGCACACCGGCGCCGTCTTGGACTGCGCCTTCTACGATCCAACGCATGCCCTGGAGT  
TACCAGCACACCGGCGCCGTCTTGGACTGCGCCTTCTACGATCCAACGCATGCCCTGGAGT  
TACCAGCACACCGGCGCCGTCTTGGACTGCGCCTTCTACGATCCAACGCATGCCCTGGAGT

GGAGGACTAGATCATCAATTGAAAATGCATGATTTGAACACTGATCAAGAAAATCTTGTT  
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GGGACCCATGATGCCCTTATCAGATGTGTTGAATACTGTCCAGAAGTGAATGTGATGGTC  
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GGGACCCATGATGCCCTTATCAGATGTGTTGAATACTGTCCAGAAGTGAATGTGATGGTC  
GGGACCCATGATGCCCTTATCAGATGTGTTGAATACTGTCCAGAAGTGAATGTGATGGTC

ACTGGAAGTTGGGATCAGACAGTTAAACTGTGGGATCCCAGAACTCCTTGTAATGCTGGG  
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ACTGGAAGTTGGGATCAGACAGTTAAACTGTGGGATCCCAGAACTCCTTGTAATGCTGGG  
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GGAACAGCAGGCCGCGAGAGTGTGGTGTGGGACTTACGGAACATGGGTTACGTGCAGCAG  
GGAACAGCAGGCCGCGAGAGTGTGGTGTGGGACTTACGGAACATGGGTTACGTGCAGCAG

CGCAGGGAGTCCAGCCTGAAATACCAGACTCGCTGCATACGAGCGTTTCCAAACAAGCAG  
CGCAGGGAGTCCAGCCTGAAATACCAGACTCGCTGCATACGAGCGTTTCCAAACAAGCAG  
CGCAGGGAGTCCAGCCTGAAATACCAGACTCGCTGCATACGAGCGTTTCCAAACAAGCAG  
CGCAGGGAGTCCAGCCTGAAATACCAGACTCGCTGCATACGAGCGTTTCCAAACAAGCAG

GGTTATGTATTAAGCTCTATTGAAGGCCGAGTGG [ a ] AGTTGAGTATTTGGACCCAAG  
GGTTATGTATTAAGCTCTATTGAAGGCCGAGTGG [ c ] AGTTGAGTATTTGGACCCAAG  
GGTTATGTATTAAGCTCTATTGAAGGCCGAGTGG [ c ] AGTTGAGTATTTGGACCCAAG  
GGTTATGTATTAAGCTCTATTGAAGGCCGAGTGG [ c ] AGTTGAGTATTTGGACCCAAG

CCCTGAGGTACAGAAGAAGAAGTATGCCTTCAAATGTCACAGACTAAAAGAAAATAATAT  
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CCCTGAGGTACAGAAGAAGAAGTATGCCTTCAAATGTCACAGACTAAAAGAAAATAATAT  
CCCTGAGGTACAGAAGAAGAAGTATGCCTTCAAATGTCACAGACTAAAAGAAAATAATAT

TGAGCAGATTTACCCAGTCAATGCCATTTCTTTTCACAATATCCACAATACATTTGCCAC  
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TGAGCAGATTTACCCAGTCAATGCCATTTCTTTTCACAATATCCACAATACATTTGCCAC  
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AGGTGGTTCTGATGGCTTTGTAAATATTTGGGATCCATTTAACAAAAAGCGACTGTGCCA  
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ATTCCATCGGTACCCACGAGCATCGCATCACTTGCCCTTCAGTAATGATGGGACTACGCT  
ATTCCATCGGTACCCACGAGCATCGCATCACTTGCCCTTCAGTAATGATGGGACTACGCT  
ATTCCATCGGTACCCACGAGCATCGCATCACTTGCCCTTCAGTAATGATGGGACTACGCT  
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TGCAATAGCGTCATCATATATGTATGAAATGGATGACACAGAACATCCTGAAGATGGTAT  
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TGCAATAGCGTCATCATATATGTATGAAATGGATGACACAGAACATCCTGAAGATGGTAT  
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CTTCATTCGCCAAGTGACAGATGCAGAAACAAAACCCAAGTCACCATGTACTTGACAAGA  
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TTTCATTTACTTAAAGTGCCATGTTGATGATAATAAAACAATTTCGTACTCCCCAATGGTGG  
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